Application/Control Number: 10/690,158

Art Unit: 2800

Clmpto 032006 PY

Rotationally mergeable MEMS apparatus comprising the combination of:
an electronic circuit module having a MEMS active element controlling output electrode disposed in an upper layer output location thereof;

a mating MEMS active element module having an electromagnetic field movable active element disposed in an exposed, said output electrode corresponding, location thereof, said MEMS active element module including module supporting flexible tensile members connected with a substrate hinge-mounted sacrificial MEMS active element module support element;

- a MEMS active element module physical support element latching member movably mounted on said substrate and disposable in a position of mutually locked engagement with said substrate hinge mounted MEMS active element module support element in a selected off-chip and rotated about said hinge location thereof adjacent said electronic circuit module.
- 10. The rotationally mergeable MEMS apparatus of claim 9 wherein said MEMS active element module physical support element includes a slider element engageable with a tongue portion of said MEMS active element module physical support element in said position of mutually locked engagement.
- 11. The rotationally mergeable MEMS apparatus of claim 9 wherein said MEMS active element module physical support element latching member is comprised of semiconductor materials included in said MEMS active element module.
- 12. The rotationally mergeable MEMS apparatus of claim 9 wherein said MEMS active element module physical support element latching member, said module supporting flexible tensile members, said hinge-mounted sacrificial MEMS active element module support element and said MEMS active element module are comprised of silicon semiconductor materials.